

**CALIFORNIA HEALTH FACILITIES FINANCING AUTHORITY**  
**Children's Hospital Program**

**Staff Summary**  
**Resolution 2006-01**  
**January 26, 2006**

**Applicant:** Children's Hospital - # CHSD - 02  
San Diego (CHSD)  
3020 Children's Way  
San Diego, CA 92123-4282  
San Diego County

**Project Site:** 3020 Children's Way  
San Diego, CA 92123-4282

**Amount Requested:** \$10,143,751      **Prior Amount Awarded:** \$1,122,880

**Description of Applicant:**

CHSD is a 501(c)(3) general acute care hospital with a current license from the Department of Health Services. The 2005 (year ending June 30) audit was submitted and it was free of "going concern" language.

**Project:**

CHSD is seeking grant funds for several projects. The projects are:

• First floor remodel	\$3,824,649
• Less contributions	(\$425,180)
• Helipad upgrade	\$554,621
• Picture Archiving and Communicating System (PACS)	\$531,157
• CT scanner and remodel	\$2,919,090
• Equipment purchases	<u>\$2,739,414</u>
	<b>Total \$10,143,751</b>

CHSD's campus consists of several buildings. One is called the Rose Pavilion.

**Rose Pavilion - First floor remodel**

CHSD plans to improve the Emergency Department's (E.D.) capacity and efficiency. The first floor currently consists of the E.D., Orthopedic Department (Ortho) and EEG Clinic.

When the Rose Pavilion was constructed in 1993, the E.D. was designed to handle 25,000 visits per year. Currently, the E.D. handles 57,000 visits a year. The wait times can be eight hours or longer. Many parents cannot or do not wait for their child to be seen and leave. Thus a child may go to another healthcare facility, which does not specialize in pediatric care or worse the child may not be seen at all by a medical professional.

The remodel will utilize the same foot print, but with improved functionality. For example, Ortho will be moved to another part of the floor, which will then free up additional space for E.D. overflow. Also, E.D. can share Ortho's x-ray room, thus a child will not have to be transported to the x-ray room that is upstairs. Some of the key E.D. improvements are:

- An increase in the number of triage rooms from one to three. The rooms can also be used as exam rooms, if necessary.
- An increase in the number of exam rooms from seven to eight.
- An additional observation room with medical gases.
- An enlarged registration area to accommodate three registration stations. It will be relocated to improve the visibility from the waiting room and add a bullet proof glass for additional security.
- An expanded the Children's Hospital Emergency Transfer (CHET) dispatch desk.

Ortho will take over the underutilized space of the EEG department, which will be moving to another location on the campus. Ortho will then be next to E.D., since E.D. receives a significant number of children each day with broken bones. The Ortho waiting room will be expanded to include three x-ray rooms for a total of five. Also, an additional casting room with three new bays (for a total of six) will be adjacent to the x-ray rooms. Once the renovation is complete, children with broken bones can go directly to Ortho, reducing pressure on the E.D.

### **Rose Pavilion - Helipad upgrade**

The recently retrofitted helipad is located on the roof of the Rose Pavilion. The original pad was constructed to handle a load of 7,000 pounds. Over the years, the helicopters have increased in size and are no longer able to land at the hospital. Sharp Memorial Hospital, which is adjacent to CHSD, agreed on an interim basis to accept helicopters on behalf of CHSD with children transported back to CHSD by the CHET team.

However Sharp Memorial cancelled its agreement with CHSD about a year and a half ago. CHSD located a temporary helipad across the street from its E.D. until the retrofit was completed. Now, the new retrofitted helipad accepts all helicopter transports except for military helicopters. The current load rating is 12,000 pounds and a maximum length of 57.3 feet.

### **PACS**

PACS is a digital imaging system using computers or networks dedicated to the storage, retrieval, distribution and presentation of images. CHSD is the only hospital in San Diego without this technology. CHSD plans to use the grant funds to purchase equipment and pay for capital costs associated with the infrastructure improvements.

PACS handles images from various modalities, such as ultrasonography, magnetic resonance imaging, positron emission tomography, computed tomography and radiography (plain X-rays). PACS replaces hard-copy based means of managing medical images, such as film archives. It expands on the possibilities of such conventional systems by providing capabilities of off-site viewing and reporting (distance education, tele-diagnosis). Additionally, it enables practitioners at various physical locations to peruse the same information simultaneously (teleradiology). With the decreasing price of digital storage, PACS systems provide a growing cost and space advantage over film archival.

### **CT Scanner and remodel**

In 2005, CHSD bought a 64-Slice CT scanner to supplement its 1-Slice CT scanner. It is requesting grant funds to reimburse the purchase costs and the construction costs associated with the installation of the machine. A CT scanner uses x-ray technology combined with computer science to produce cross-sectioned images of the body.

### **Equipment purchases**

CHSD is requesting grant funds to reimburse for the costs associated with patient care equipment. The Neonatal Unit, Surgery, Radiology, Laboratory and other patient care units benefited from these purchases. Some of the equipment that was purchased included ECG and CO<sub>2</sub> monitors, an ethylene oxide sterilizer, a surgical operating microscope and an NIM Response System, which monitors nerves during surgery to ensure that the nerves are not damaged during a surgical procedure.

### **Proposition 61 Evaluation Factors:**

Based on the review of the application and other submitted materials, staff evaluated CHSD's project using the six factors identified in Proposition 61 language.

*The grant will contribute toward expansion or improvement of health care access by children eligible for governmental health insurance programs and indigent, underserved, and uninsured children:*

Approximately 54 percent of the patients are Medi-Cal eligible.

### **Rose Pavilion - First floor remodel**

The remodeling project will increase capacity in both the E.D. and Ortho. Additional triage exam rooms, more x-ray rooms and casting bays will increase access for the most vulnerable children to be seen and treated in a timely manner. With more capacity, wait times should be reduced and lessen the likelihood of parents prematurely leaving the E.D.

### **Rose Pavilion - Helipad upgrade**

With an upgraded helipad, CHSD is in a position to accept all helicopter transports (except military), thus it has the ability at a minimum to accept the same number of transfers. Also, CHSD no longer has to pay to use another facility's heliport, which will

save needed funds to be used for patient care. Annually, over 1,200 children are transported by the CHET team.

### **PACS**

Instead of waiting for x-ray films to be developed, digital images will be available immediately. Faster reading of the images will improve patient flow. Also, the digital storage of images means the end of missing/misplaced films, so that patients do not need to take replacement pictures. This will free up machines to handle additional capacity.

### **CT Scanner and remodel**

The 64-Slice CT scanner has increased CT capacity and scans many times faster than the 1-Slice CT. Since it's faster, CHSD can scan more patients and fewer children will need to be rescanned due to a child moving during the procedure.

### **Equipment purchases**

The hospital needs to replace outdated equipment to stay current with the ever changing technological environment. For example, the new patient monitors will be more sophisticated, which will allow CHSD to admit sicker patients. Also, new surgical equipment will allow physicians to perform newer and more innovative procedures.

*The grant will contribute toward the improvement of child health care or pediatric patient outcomes:*

### **Rose Pavilion - First floor remodel**

Increased capacity will increase the quality of child health care. First, triage will increase from one to three rooms. Currently, wait times can be eight hours or longer. With the new remodel, most families will be seen within an hour. Children with serious illnesses tend to deteriorate quicker than adults, thus reducing the wait time will help prevent that type of incidence.

Increased traffic flow efficiency will reduce the time it takes to place a cast on a child. Anything that reduces treatment time reduces the stress put not only on the patient, but also on the family.

### **Rose Pavilion - Helipad upgrade**

By having the helipad on-site versus off-site, children will be able to be directly transported to the E.D. For a critically ill/injured child, sometimes the saving of a few additional minutes can mean the difference between life and death.

### **PACS**

Digital images will be immediately available to the physician. A faster diagnosis will result in faster treatment. This quicker turn around time will help the E. D. meet its goal to reduce the amount of time the patient spends waiting.

### **CT Scanner and remodel**

The 64-Slice CT Scanner has provided the following benefits:

- With two scanners, CHSD has provided more scans and reduced wait times. Also, the emergency scans no longer disrupt the regularly scheduled scans, thus eliminating the need to reschedule the regular scans due to emergencies.
- The 1-Slice CT scanner needs to be manually calibrated to adjust the radiation dosage. The 64-Slice CT scanner automatically adjusts the dosage, thereby reducing the radiation risk for the children.
- The 1-Slice Scanner can take up to two minutes or more for a scan. Many children are unable to lie still for that long. Anesthesia is normally used for this procedure. Since the 64-Slice Scanner can perform a complete body scan in about 10 seconds, 95 percent of the patients no longer need to be anesthetized or exposed to other needle procedures.
- Virtual imaging has reduced and/or replaced invasive surgical procedures. Scope procedures such as a catheterization, colonoscopy or bronchoscopy are risky, uncomfortable and highly invasive.

### **Equipment purchases**

The equipment acquisitions ranged from refrigerators and microscopes for the laboratory to the latest technologically advanced surgically equipment such as sterilizers, microscopes, and a computer system that allows a 3D CT scan to be compared to anatomical structures intraoperatively.

*The children's hospital provides uncompensated or undercompensated care to indigent or public pediatric patients:*

CHSD is a certified California Children's Services (CCS) hospital. Approximately 54 percent of its net patient revenues come from government programs such as Medi-Cal and CCS. In Fiscal Year '04, CHSD provided over \$40 million in uncompensated and under-compensated care. It has financial counselors to assist in finding alternative sources of payment from both public and private programs. Also, Medi-Cal eligibility workers are on site to assist the families.

*The children's hospital provides services to vulnerable pediatric populations:*

CHSD cared for 7,319 CCS patients, which represents about 53 percent of the total patients. It is the only hospital in San Diego and Imperial Counties dedicated solely to pediatrics. CHSD has the only Level 4 (most acute) Neonatal Intensive Care Unit in the region.

*The children's hospital promotes pediatric teaching or research programs:*

More than 300 pediatric family practice and specialty residents train at CHSD. The residents come from five San Diego based residency programs from UCSD, Scripps (Chula Vista and Mercy) and from both Balboa and Pendleton Naval Medical Centers.

CHSD's Center for Clinical Research oversees and conducts over 200 clinical trials a year investigating new drugs, devices and techniques.

*Demonstration of project readiness and project feasibility:*

**Rose Pavilion - First floor remodel**

CHSD anticipates the Office of Statewide Health Planning and Development (OSHPD) to have the initial plan review to be completed January 2006. The construction is to start in April and be completed in October 2006.

**Rose Pavilion - Helipad upgrade**

Planning started in 2003 and the construction of the newly retrofitted helipad took place from April 2005 to July 2005.

**PACS**

CHSD began purchasing the PACS in July 2005 and should conclude in early 2006.

**CT scanner and remodel**

Construction started in December 2004 and completed in November 2005 with equipment purchased during the same period.

**Equipment purchases**

CHSD purchased equipment from June 2003 through September 2005.

<u>Sources of Funds:</u>		<u>Uses of Funds</u>	
CHFFA Grant	\$10,143,751	Remodel	\$4,379,270
Internal funds	<u>\$425,180</u>	Equipment Purchases	<u>\$6,189,661</u>
TOTAL	<u>\$10,568,931</u>	TOTAL	<u>\$10,568,931</u>

**Legal Review:**

No information was disclosed to question the financial viability or legal integrity of the Applicant.

**CHFFA Bond Issues:**

CHSD has two Authority bond issues dated 1993 and 1996. The current outstanding balance for the two bond issues totals \$80,665,000 as of June 30, 2005.

**Staff Recommendation:**

Staff recommends the Authority approve a resolution for Children’s Hospital – San Diego to provide a grant not to exceed \$10,143,751 (less costs of issuance), subject to all requirements of the Children’s Hospital Program.